PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 158165 CL-AT	FOR FURTHER ACTION	See Form PCT/IPEA/416	
International application No. PCT/NO2004/000189	International filing date (day/month/year) 25.06.2004	Priority date (day/month/year) 03.07.2003	
International Patent Classification (IPC) or r B62B9/20, F16B7/14	national classification and IPC		
Applicant STOKKE AS et al.			
This report is the international pre Authority under Article 35 and trai	eliminary examination report, established nsmitted to the applicant according to Ar	by this International Preliminary Examining ticle 36.	
This REPORT consists of a total of	of 4 sheets, including this cover sheet.		
 This report is also accompanied b 			
a. 🛭 sent to the applicant and to	o the International Bureau) a total of 1 s	heets, as follows:	
 sheets of the description and/or sheets containing Administrative Instruct 	ig rectifications authorized by this Author	een amended and are the basis of this report rity (see Rule 70.16 and Section 607 of the	
sheets which supersed beyond the disclosure Supplemental Box.	le earlier sheets, but which this Authority in the international application as filed, a	considers contain an amendment that goes is indicated in item 4 of Box No. I and the	
Sequence ilsting and/or table	ureau only) a total of (indicate type and n les related thereto, in computer readable Listing (see Section 802 of the Administr	number of electronic carrier(s)) , containing a form only, as indicated in the Supplemental ative Instructions).	
4. This report contains indications rel	ating to the following items:		
Box No. I Basis of the opin	ion		
☐ Box No. II Priority			
☐ Box No. III Non-establishme	nt of opinion with regard to novelty, inver	ntive step and industrial applicability	
☐ Box No. IV Lack of unity of ir		applicasility	
applicability, citat	nent under Article 35(2) with regard to no ions and explanations supporting such s	ovelty, inventive step or industrial tatement	
☐ Box No. VI Certain documen			
☐ Box No. VII Certain defects in			
☐ Box No. VIII Certain observation	ons on the international application	•	
Date of submission of the demand	Date of completion	of this report	
03.05.2005	22.11.2005		
lame and mailing address of the international reliminary examining authority:	Authorized Officer		
European Patent Office - P.B. 58 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 65 Fax: +31 70 340 - 3016	Coudarlies E	70 340-3363	

INTERNATIONAL PRELIMINARY REPORT • ON PATENTABILITY

International application No. PCT/NO2004/000189

_	Box No. I Basis of the report			
-				
1	 With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item. This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of: international search (under Rules 12.3 and 23.1(b)) publication of the international application (under Rules 12.4) international preliminary examination (under Rules 55.2 and/or 55.3) 			
2	2. With regard to the elements* of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):			
	Description, Pages			
	1-4	as originally filed		
	Claims, N	lumbers		
	1-4	received on 10.05.2005 with letter of 03.05.2005		
	Drawings, Sheets			
	1/3-3/3	as originally filed		
	□ a se	quence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing		
3.		amendments have resulted in the cancellation of:		
	IJ th	e description, pages e claims, Nos.		
	□ th	e drawings, sheets/figs		
	∐ th □ ar	e sequence listing (specify): ny table(s) related to sequence listing (specify):		
4.	∏ Thie i	report has been established as if /some at the		
	nau not bi	report has been established as if (some of) the amendments annexed to this report and listed below een made, since they have been considered to go beyond the disclosure as filed, as indicated in the ental Box (Rule 70.2(c)).		
	☐ the	e description, pages e claims, Nos.		
	☐ the	e drawings, sheets/figs		
	☐ the	e sequence listing (specify):		
		y table(s) related to sequence listing (specify):		
	* It it	em 4 applies, some or all of these sheets may be marked "superseded."		

Box No. V- Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

1-4

No: Claims

Inventive step (IS)

Yes: Claims

1-4

No: Claims

Industrial applicability (IA)

Yes: Claims No: Claims

1-4

2. Citations and explanations (Rule 70.7):

see separate sheet

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

PCT/NO2004/0O0189

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Subject: Locking device for a telescopic stem of a trolley

Prior art: document D1 = GB2351762 shows a locking device according to the preamble of claim 1

Problem: the locking device risks sliding as load is applied

Solution: by the characterising features of claim 1, in particular by providing a toothed friction element in the outer stem into which a toothed blocking element is pressed by a conical groove (or, as specified in the description page 3 line 21: a conical area or track). The locking device of D1 relies on friction forces created by the expansion of an elastic material, when the device of D1 interposes a friction element, the blocking element can grasp the friction element as they are both toothed.

The solution is neither shown nor suggested by the available prior art.

Therefore the claim 1 and the dependent claims 2 - 4 meet the requirements of Articles 33(2) and 33(3) PCT.

Patent claims

- Locking device for a telescopic stem for a trolley, wherein the stem comprises an inner stem (1) connected to a handle (1a), which may glide within an outer stem (2), a handle (8) at the upper end of the inner stem (1) for controlling the locking of the inner stem (1) in relation to the outer stem (2), the handle (8) connected to a rod (7) running through the inner stem (1), characterised in that a toothed friction element (3) is arranged in the outer stem (2) and that the inner stem (1) is equipped with a toothed blocking element (4) locking into the friction element (3) and preventing movement of the inner stem (1) in relation to the outer stem (2) when the blocking element (4) is pressed into the toothed friction element (3) by a conical groove (6) of a housing (5) connected to the rod (7) influencing the position of the housing (5).
- Locking device according to claim 1,
 characterised in that the friction element (3) is arranged
 on an inner area of the outer stem (2).
 - 3. Locking device according to any of the claims 1-2, characterised in that the a blocking element (4) is arranged on the lower side of the stem (1), opposite the friction element (3).
- 25 4. Locking device according to any of the claims 1-3, characterised in that the housing (5) and/or the blocking element (4) is spring-loaded by a spring (9), automatically affecting locking by the friction element (3).